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## A Model For Integrating **Independent Physicians Into Accountable Care Organizations**

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ABSTRACT The Affordable Care Act encourages the formation of accountable care organizations as a new part of Medicare. Pending forthcoming federal regulations, though, it is unclear precisely how these ACOs will be structured. Although large integrated care systems that directly employ physicians may be most likely to evolve into ACOs, few such integrated systems exist in the United States. This paper demonstrates how Advocate Physician Partners in Illinois could serve as a model for a new kind of accountable care organization, by demonstrating how to organize physicians into partnerships with hospitals to improve care, cut costs, and be held accountable for the results. The partnership has signed its first commercial ACO contract effective January 1, 2011, with the largest insurer in Illinois, Blue Cross Blue Shield. Other commercial contracts are expected to follow. In a health care system still dominated by small, independent physician practices, this may constitute a more viable way to push the broader health care system toward accountable care.

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he Affordable Care Act of 2010 included several delivery system reforms intended to address deficiencies in the way health care is delivered in the United States. Among these is the accountable care organization. The Centers for Medicare and Medicaid Services (CMS) defines an accountable care organization (ACO) as "an organization of health care providers that agrees to be accountable for the quality, cost, and overall care of Medicare beneficiaries who are enrolled in the traditional fee-for-service program who are assigned to [the organization]."1

The ACO model is not confined to public programs such as Medicare and Medicaid. Advocates of ACOs contend that these future care systems will strengthen US health care by improving care, controlling costs, and being held accountable for results. However, there are at least four major challenges to implementing

accountable care organizations across the United States. First is the dominance of solo and small-group independent physician practices that provide care to the majority of the US population. Second is the voluntary medical staff structure within most hospitals, which fails to engage physicians in leading the system changes needed to deliver consistently safe, cost-effective, and high-quality care.2-4 A third challenge is the dominance of fee-for-service reimbursement, which makes moving to more performance-based payment systems difficult. Fourth is the need to spur ACOs in the private, commercial market and not just confine them to publicly financed programs in Medicare and Medicaid.

#### **Challenges To Overcome**

ADJUSTING TO THE DOMINANCE OF SMALL PRAC-TICES The current focus for ACO development has been on finding ways to build more fully

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integrated systems that for the most part would employ their own staff physicians. However, few such organizations exist. Most parts of the country have no such integrated health care systems, and fewer than 15 percent of US physicians are believed to be affiliated with them.<sup>5</sup>

Other types of accountable care organizations focused on solo and small-group physician practices could give the concept broader reach. Several models that could bolster the spread of accountable care organizations include physician-hospital organizations, independent practice associations, virtual physician organizations, and health plan–provider networks.<sup>2</sup>

Nevertheless, there are numerous reasons why the ACO model is difficult to apply to solo and small-group practice. Solo practitioners and small groups rarely have the capital to invest in the kind of information technology (IT) or quality improvement training for staff that is necessary to achieve ACO status. Their small size makes it difficult to implement key quality tools such as disease registries or electronic health records. Management support and a culture of developing consistent processes can help larger groups outperform small groups. 9-11

**STAFF** The weaknesses of the traditional hospital medical staff structure, which relies heavily on independent, voluntary physicians, have been documented by numerous observers. <sup>4,12</sup> These weaknesses include a lack of demonstrated ability to rapidly improve quality and safety; to remove from staff any physicians practicing suboptimal care; and to reward physicians for improved performance. These limitations make the hospital medical staff, although widely available across the country, a poor chassis for a successful accountable care organization. Other structures that include independent physicians will need to be used.

Fee-for-service reimbursement is often criticized for rewarding volume and intensity of health care services rather than quality and outcomes. For these reasons, many "pay for performance" programs have developed over the past decade to encourage higher quality, better outcomes, and greater cost-effectiveness instead of volume.

NEED TO MOVE BEYOND PUBLIC PROGRAMS The Affordable Care Act offers new potential to test these approaches, but it focuses on doing so through Medicare and Medicaid.<sup>13</sup> However, similar innovations need to take place in the private, commercial market if accountable care organizations are to succeed widely. The capital, information technology, and management resource needs are significant for an accountable care organization, and the resources must be

spread over a large patient population. Furthermore, to most effectively reengineer the clinical practice of hospitals and physicians—a fundamental characteristic of accountable care—an ACO should address the care of all patients, those in federal and commercial insurance programs alike.

#### Accountable Care: A Model

Advocate Physician Partners, a joint venture representing approximately 3,500 physicians serving patients in Illinois, offers a solid example of a care system that could serve as a model for new accountable care organizations. Advocate Physician Partners, hereafter referred to as the partnership, is affiliated with Advocate Health Care (hereafter called Advocate), a not-for-profit, faith-based health system in northern and central Illinois. The system has ten hospitals, offers home care, and employs 800 physicians in large multispecialty groups who are members of the partnership.

For more than fifteen years, the partnership, a joint venture between physicians and Advocate, has performed care management and managed care contracting. Practices in the partnership include solo and group, single-specialty and multispecialty, employed and independent. There are 2,700 independent physicians in the partnership who work in more than 900 solo or small, single-specialty group practices of three physicians or fewer. There are about 1,700 other independent physicians who are not in the partnership but are on the staffs of Advocate hospitals. Member physicians provide care for almost one million patients in commercial health insurance programs; 230,000 in health maintenance organization (HMO) plans and more than 700,000 in fee-for-service plans.

The partnership's independent physicians share in its governance with Advocate Health Care. This is accomplished through two equal classes of governance votes, one for Advocate and one for local physician-hospital organizations. The votes of a majority of each class is required for a measure to pass.

Physicians elect the leaders of each local physician-hospital organization, who then send a delegate to the overall partnership board. Furthermore, employed physicians occupy many of the Advocate governance seats in the partnership, which places physicians in a supermajority and hospital managers in a minority of individuals serving.

This arrangement creates a structure that enables physicians and hospitals to work together to improve care with common quality and cost-effectiveness goals. Physicians and hospitals are

collectively accountable for quality and cost during negotiations with payers, because the partnership negotiates on behalf of both Advocate and physicians and signs single-signature contracts. Physicians must also meet strict membership requirements, such as threshold scores on annual performance report cards and use of key information technology.

Each hospital and its associated partnership physicians—those employed and those who are independent—have a local physician-hospital organization board that leads physicians toward quality, patient safety, and cost goals. Physician governance contributes to widespread physician acceptance of performance measurement and improvement.

For example, during 2004 and 2005 the partnership removed more than fifty physicians for noncompliance with the use of IT. Such an act would not have been possible without the strong physician governance afforded by the overall arrangement. Another example of strong governance is support for a progressively more comprehensive and challenging set of physician performance goals described below, which are set each year and which physicians must meet to remain in the partnership.

During the past fifteen years, the governance, culture, incentive programs, and infrastructure for reengineering care in the partnership has improved. Many patients have been enrolled in risk programs, or health maintenance organization—type arrangements, in which overall payments to the partnership are capitated.

During the past seven years in particular, however, the partnership also has extended its quality and cost-effectiveness programs used for capitated patients to patients in fee-for-service health insurance plans. We contend that, to be effective, accountable care organizations will have to be flexible enough to care for patients covered by payers that have dominant payment systems of either fee-for-service or capitation.

#### **Limitations Of This Case Report**

This case study covers both commercially insured risk and fee-for-service patients in the partnership's program. Only a small number are older than age sixty-five, and it is unknown whether the model would be successful if expanded to Medicare and Medicaid populations.

A number of the inferred medical cost savings of the program are based on the achievement of key clinical outcomes that have been demonstrated in the literature to reduce costs. For example, the cost savings from the better control of blood glucose for patients with diabetes compared to benchmarks is estimated based on the

literature. 14-16 At this time, the partnership demonstrates better blood glucose control but does not yet have the data to demonstrate those savings in its population.

Although the partnership's program recently expanded to central Illinois physicians, some of whom are in rural practices, performance improvement has not yet been demonstrated in those locations. However, the ability to integrate small practices and use web-based communication are hallmarks of the partnership's experience and will be important to improving performance for rural practitioners.

The partnership's performance for fee-forservice patients exceeds benchmarks, as described below. However, there are limited published benchmarks for fee-for-service patients, and data collection methods for those benchmarks may still limit accurate comparison.

Finally, the partnership has deep experience as a risk contractor. For example, this experience has helped the partnership establish governance responsible for both quality and costs, disseminate and enforce mandatory protocols for physicians, and provide regular feedback to physicians on performance and incentive payments.

#### How Advocate Physician Partners Overcomes The Barriers To ACO Adoption

**DOMINANCE OF FEE-FOR-SERVICE PAYMENT** The current fee-for-service system does not reimburse physicians adequately for beneficial activities such as chronic disease management, preventive counseling, and care coordination. The pay-for-performance system developed by Advocate Physician Partners addresses these short-comings. It is based on performance against an extensive list of metrics, discussed below, that cover technology use, efficiency, quality, safety, and patient experience.

Performance payments to both primary care physicians and specialists are based on several factors. These include individual performance on a specialty-specific report card; the performance of a physician-hospital organization on all metrics; and other "work" incentives. "Work" measures have included the number of patients in each physician's registry; physicians' use of inpatient computerized physician order entry; and inpatient efficiency measures such as length-of-stay.

The intended effect of these performance payment incentives is to increase individual accountability and focus physicians on population health as well as the health of individuals. The performance payment system is also intended to create accountability for group performance,

which in turn creates peer pressure to improve; to increase collaboration across specialties; and to increase physicians' engagement with hospital goals.

Funding for the pay-for-performance program, currently 10 percent of allowable billings, is established through negotiation with the insurance carriers. In the future, "shared savings" from an accountable care organization could finance such a fund and would be distributed using similar techniques. In the spring of 2010, the partnership distributed \$38 million in incentive payments to its 3,700 physicians, both independent and employed.

TICES Federal antitrust law generally prohibits joint negotiations by independent practices, but the Federal Trade Commission has granted the partnership model regulatory approval that allows independent physician practices to negotiate together for fee-for-service contracts. The reason is that the practices are deemed to be improving quality, patient safety, patient experience, and efficiency, and therefore to be producing benefits to the public through financial or clinical integration. In the case of the partnership, joint negotiation is crucial to engaging physicians and rewarding them for improvement.

▶ JOINT CONTRACTING: Because HMO contracts typically include integration through shared financial risk, the Federal Trade Commission (FTC) has traditionally permitted joint contracting for HMO products. The commission has also allowed joint contracting on the basis of "clinical integration" in a limited number of situations, including the partnership. Additionally, the partnership accounts for only 15 percent of physicians and hospitals in its market, northern and central Illinois. This is much less than the typical level at which antitrust scrutiny related to market concentration is raised.¹8

The permission from the FTC for joint contracting by independent physicians has made it possible for the partnership to negotiate feefor-service (preferred provider organizations) contracts with the nine major managed care organizations in the northern Illinois market. The partnership also has two HMO (risk) contracts.

Because managed care organizations typically reimburse providers using fee-for-service payment arrangements, the model that the partnership has developed with them, which includes both fee-for-service and incentive arrangements, could easily be extended to other provider organizations across the country.

▶ OTHER REASONS FOR PHYSICIANS TO JOIN: In addition to joint contracting, physicians join the partnership for several other reasons. Most

view it as an opportunity to take a lead role in improving health care. Because the partnership negotiates on their behalf, physicians need not directly interact with multiple managed care organizations.

Similarly, because all of the local-market managed care organizations delegate credentialing of physicians to the partnership, the administrative burden for physicians to obtain network credentialing by each organization is greatly reduced. The partnership uses a central verification organization accredited by the National Committee for Quality Assurance (NCQA) to establish that participating physicians are properly credentialed.

The partnership provides physicians with quality improvement expertise and an infrastructure to drive performance improvement. That infrastructure includes electronic information systems that would otherwise be beyond their capital resources (see Appendix). 19,20

▶ COMMON MEASURES: The partnership has also negotiated a common set of performance measures with all contracting managed care organizations to improve quality and cost-effectiveness (see Appendix).<sup>20</sup> By identifying a single set of measures with standard definitions and data collection mechanisms spanning all payers, the partnership can focus the attention of physicians and hospitals on meeting these performance measures.

Before this single set of measures was accepted, each managed care organization had its own set of measures, thresholds for success, and data-reporting processes. This proliferation of metrics created a sizable administrative burden for providers and resulted in diffusion of improvement efforts.

In contrast, the use of a single set of measures is a key reason that outcomes improvement has been realized. It is rare that a single payer has adequate data on physician performance to draw any statistically sound conclusions. By having the same set of metrics across all payers, the partnership provides meaningful feedback on physician performance.

The partnership's pay-for-performance program rewards physicians for activities not covered by the traditional fee-for-service system, such as patient outreach, reduced hospital length-of-stay, reduced emergency department use, and counseling of patients about optimum use of generic pharmaceuticals. At the same time, the partnership provides transparency of performance results to the public, as described below.

▶ PHYSICIAN LEADERSHIP: Physician leadership has been essential for the success of this approach. At any given time, more than 100

physicians are involved in various governance activities across the partnership.

Given the philosophy that a governance body's most important resource is its time, considerable effort is spent to ensure optimal use and outcomes of that time. Each governance bodyincluding the partnership board; each local physician-hospital organization board; and key partnership committees such as quality, credentialing, utilization, and contracting-has a written committee charter outlining the scope of its responsibilities and formal position descriptions for chairs and members of those bodies. New physician governance members are selected through dialogue between management and local physician-hospital organization boards, and prospective candidates are also screened for potential conflicts of interest.

A formal orientation program is required for all physicians engaged in governance. This orientation provides background and perspective on the organization and its key strategies, as it allows for a discussion of fiduciary responsibilities and other performance expectations. The partnership pays physicians for their time on key governance bodies.

**VOLUNTARY MEDICAL STAFF MODEL** Hospitals view the partnership model as a way to meet critically important clinical, efficiency, and patient satisfaction goals. Furthermore, the partnership model allows education, peer pressure, and financial rewards to stimulate physicians to make use of hospital technologies, such as electronic health records. This redresses a common problem: Hospitals often invest heavily in technologies that are then underused by physicians.

The partnership has coordinated its annual incentive program with the hospital management incentive program, so some goals are shared. These include CMS performance measures and patient safety goals. In addition, the partnership's membership criteria are more stringent than those of the hospital medical staff. Another advantage for the hospital is the development of physician leaders through the partnership governance structure and an opportunity to plan jointly with this leadership. Finally, this partnership is expected to strengthen physicians' loyalty to the hospitals.

#### **Success In The Private Market**

The partnership has successfully negotiated feefor-service contracts with all major managed care organizations in the northern Illinois market, as well as two risk contracts from 2006 through 2010. Payers view the partnership's approach as a way to collaborate with providers to reduce medical costs and improve care.

As described above, negotiations have led all managed care organizations to agree to a common set of performance measures, thereby allowing the partnership to focus its efforts on shared goals (see Appendix).<sup>20</sup>

The partnership works to reduce the resources used across episodes of care—for example, annual total costs for patients with chronic diseases such as asthma and diabetes, or total episode costs for patients with severe arthritis requiring total joint replacement. This strategy has permanent benefit, unlike simple reduction of unit costs, which can result in volume increases attributable to physician-induced demand and desire to achieve target incomes.<sup>21</sup>

The partnership follows a deliberate process to make it responsive to the market by selecting, dropping, or modifying performance measures, which currently number 116. These measures are grouped into five categories: clinical effectiveness; cost-effectiveness; patient safety; patient experience; and use of key technology. Staff and physicians evaluate nationally recognized measures endorsed by the National Quality Forum and other national organizations. The partnership sets priorities based on discussions with key external stakeholders, hospitals, and physicians. When best-practice performance targets are achieved consistently, measures are retired.

Communicating performance to payers, employers, the general public, physicians, and system hospitals is important for accelerating improvement as well as for documenting success and identifying opportunities for improvement. An annual Value Report<sup>20</sup> is published each spring documenting the prior year's performance (see Appendix for excerpt).<sup>22</sup> This publication highlights actual performance against benchmarks. Incremental performance above the expected level is translated into value for an employer and payer.

For example, the report translates the success of depression screening into reduced costs of medical care and reduced indirect health care costs such as days lost from work. The structure of this report helps maintain the partnership's focus on having a business case. By aligning the individual self-interests of key stakeholders, the partnership creates value through collaboration.

### **Success In Improving Quality And Reducing Costs**

Examples of success in improving quality and reducing costs are provided below. Further results are available online in the Value Report.<sup>22</sup>

**INTENSIVE CARE UNIT MORTALITY** Advocate Health Care hospitals invested more than

\$10 million in the technology of eICU, an IT system that provides biometric, electronic, and video monitoring at a centralized command center for all 250 adult intensive care beds in eight of its ten acute care hospitals. (BroMenn and Eureka hospitals were recently added to Advocate and are not yet included in the eICU program.) There are computerized prompts and reminders to provide eICU staff with early warning that a patient's condition is deteriorating or that an adverse drug interaction could occur.

This "command center" is staffed around the clock by board-certified intensivists and intensive care nurses. The command center staff supplements the bedside staff and attending physicians.

Four levels of participation by attending physicians with eICU have been used. Some attending physicians have been reluctant to allow the eICU physician to modify a treatment plan until they have been reached and consent given. This can delay interventions when attending physicians are in surgery or when response by the attending to the eICU is delayed. Furthermore, compliance with evidence-based protocols have improved with more delegation to eICU physicians.

The four levels allow attending physicians to control the level of delegation of authority. At one extreme (lowest level), the attending physicians allow intervention with patients only if a cardiac arrest occurs; at the other (highest level), attending physicians allow the plan of care to be changed by eICU staff before notifying the attending physician. To use eICU optimally, attending physicians agree to participate at the highest level and allow the command center intensivists to modify the treatment plan in real

time based on patients' condition.

The partnership actively promoted this program by educating its members. In addition, physicians' participation was part of the physician and local physician-hospital organization incentive program. Over a three-year period, the percentage of member physicians participating in the highest-level eICU program rose from 73 percent to 96 percent. In 2007, partnership physicians had a much higher rate of participation at the eICU highest level for every specialty than nonmember physicians, who constitute about 35 percent of physicians on the staffs of Advocate Health Care hospitals (p < 0.005) (Exhibit 1). Subsequently, a high level of participation in eICU became a membership requirement for partnership physicians.

Mortality (both raw and risk-adjusted) has decreased for adult intensive care patients steadily since the eICU program was implemented in 2003. A key reason for this outcome is the high participation in eICU by partnership physicians, which has greatly facilitated the implementation of clinical protocols such as those that reduce central-line infections and ventilator-associated pneumonia.

Between 2004 and 2009, central-line infections fell steadily from sixty-four to thirty-three per year, which equates to 0.8 infections per thousand central-line days. That compares favorably to the national average of 5 infections per thousand central-line days.<sup>23</sup> Ventilator-associated pneumonia and associated costs from this complication have been reduced (Exhibit 2). The rate of fewer than 0.5 cases per thousand ventilator days compares favorably to the national rate of 2–11 per thousand ventilator days.<sup>24</sup>

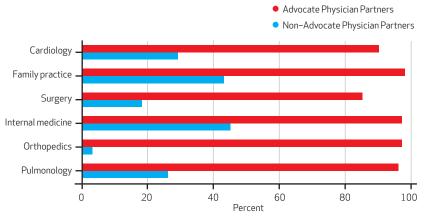
**OVERALL RANKING FOR QUALITY AND EFFICIENCY** Advocate Health Care management believes that the physician and hospital collaboration driven by the partnership was a major factor behind the outcomes that led Thomson Reuters to rank Advocate in the top 10 of 252 health systems for quality and efficiency for 2009 and 2010. For many of the partnership's 116 performance measures, hospital managers have the same incentive metrics that physicians have.

**IMMUNIZATIONS AND CHRONIC DISEASE OUT- COMES** The partnership's focus on disease registries and practice reengineering has driven performance improvement in such areas as immunizations and chronic disease care. Results now compare favorably to the best results achieved by HMOs and preferred provider organizations (PPOs) as reported by the NCQA. Exhibit 3 shows 2009 results for HMO and PPO patients for the partnership as well as national means.

In particular, the partnership's results typi-

#### EXHIBIT 1

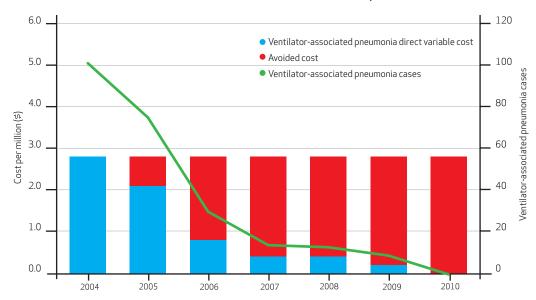
### Adoption Of elCU By Physicians At Advocate Hospitals, 2007



**SOURCE** Advocate Health Care. **NOTE** Data for hospitals with electronic intensive care unit (eICU) available.

#### EXHIBIT 2

#### Ventilator-Associated Pneumonia In The Intensive Care Unit: Avoided Cost Trend, 2004-10



**SOURCE** Advocate Health Care. **NOTES** Cost per million is the avoided direct variable cost and avoided cost expressed in millions of dollars; it is represented by red and blue bars and relates to the left-hand y axis. The number of cases is represented by the green line and relates to the right-hand y axis. Cases for 2010 were forecast based on an annualization of January 10–April 10 data. Bethany Hospital was excluded from January 2007 forward. BroMenn Medical Center was included as of January 2010.

cally exceed NCQA results for measures that involve significant condition management such as control of blood sugar, cholesterol, and blood pressure.<sup>25,26</sup> Previously, the NCQA and others<sup>27</sup>

have reported that the performance for patients in PPOs significantly lags that of patients in HMOs. However, the partnership has narrowed this performance gap.

#### EXHIBIT 3

Quality Outcome Comparison: HEDIS National Means Versus Advocate Physician Partners (APP) Scores, 2009

	Health maintenance organization (HMO)			Preferred provider organization (PPO)		
Measure	HEDIS (%)	APP (%)	Difference (percentage points)	HEDIS (%)	APP (%)	Difference (percentage points)
CHILDHOOD IMMUNIZATION						
Combination 3	73.4	83.0	9.6	40.4	78.0	37.6
DIABETES						
HbA1c testing Poor HbA1c control (> 9) <sup>a</sup> Good HbA1c control (< 7) Eye exams LDL-C screening LDL-C control (< 100) Monitoring nephropathy Blood pressure control (< 130/80) Blood pressure control (< 140/90)	89.2 28.2 42.1 56.5 85.0 47.0 82.9 33.9 65.1	88.0 32.0 42.0 54.0 84.0 54.0 88.0 72.0 72.0	(1.2) (3.8) (0.1) (2.5) (1.0) 7.0 5.1 38.1 6.9	83.3 44.6 30.3 42.6 78.6 36.8 69.9 23.6 46.3	70.0 43.0 35 37.0 67.0 47.0 60.0 58.0 58.0	(13.3) 1.6 4.7 (5.6) (11.6) 10.2 (9.9) 34.4 11.7
CARDIAC						
LDL-C screening LDL-C control (< 100)	88.4 59.2	88.0 72.0	(0.4) 12.8	80.2 42.3	79.0 68.0	(1.2) 25.7

**SOURCES** Advocate Health Care; National Committee for Quality Assurance (NCQA). **NOTES** Entries in parentheses indicate worse score for Advocate Physician Partners than NCQA. HEDIS is Healthcare Effectiveness Data and Information Set. HbA1c is hemoglobin A1c, a measure of diabetes control. LDL-C is low-density lipoprotein cholesterol. LDL-C is low-density lipoprotein cholesterol. LDL-C is low-density lipoprotein cholesterol.

success with asthma As part of a comprehensive program for care of asthma patients, the partnership has implemented standardized asthma action plans for patient home management that can be individualized for specific patients. This tool has been recognized as the optimal strategy for integration of different components of asthma treatment.<sup>28</sup> In 2009 the partnership implemented annual plans for 83 percent of its 5,268 asthma patients. In contrast, a national study showed that only 26 percent of controlled asthma patients and 35 percent of uncontrolled asthma patients received such a plan from their physicians.<sup>29</sup>

#### **Examples Of Cost Reduction**

**USE OF GENERIC DRUGS** The increased use of clinically appropriate generic drugs is a major opportunity to improve the cost-effectiveness of health services. A 1 percent increase in the use of generic drugs leads to a 1 percent decrease in the overall cost for a pharmacy benefit plan.<sup>30</sup>

The partnership has used a variety of techniques to accelerate the use of clinically appropriate generic drugs, including employing two full-time pharmacists who provide academic detailing to physicians.<sup>31</sup> Academic detailing is a technique of evidence-based counseling of physicians by pharmacists about the benefits, risks, patient costs, and other aspects of pharmaceuticals.

The partnership provides each physician with an online listing of all filled prescriptions, highlighting opportunities for substitution of generics. The partnership also provides patients with vouchers for generic drug copays, which has increased the use of clinically appropriate generic drugs and reduced out-of-pocket expenses for patients.<sup>32</sup>

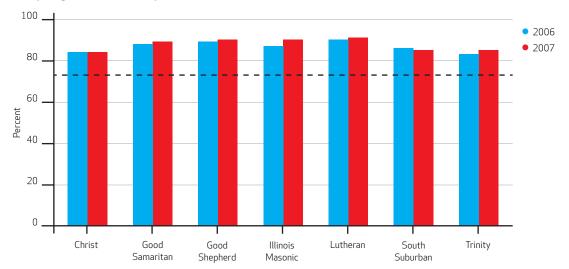
At the end of 2005, the partnership's generic prescribing rate (total generics divided by total prescriptions) was 52 percent; at the end of 2009, it was 71 percent. The comparable rates for two major insurers in the Chicago metropolitan area were 64.6 percent and 66.4 percent, respectively.<sup>33</sup> The partnership's performance led to annual savings of \$14.8 million for insurance companies, employers, and patients compared to the Chicago market.

**ADMINISTRATIVE SAVINGS** Electronic data interchange of claims has been a key metric in the partnership's program because it is a rapid way for insurance companies and physicians to reduce costs by eliminating manual handling of claims. Industry research estimates that the use of electronic data interchange can result in a savings of \$3.73 per claim for providers compared to the cost of processing claims manually.<sup>34</sup> The savings by the insurance companies would be expected to be an equal amount.

In 2007, as reported by a major insurance company, partnership physicians across all locations were submitting claims electronically at a rate well over the Chicago market rate of 74.5 percent (personal communication between authors and J. Lindquist, March 20, 2008) (Exhibit 4). This carrier reported the overall rate of electronic

#### **EXHIBIT 4**

Percentage Of Physician Service Claims Handled By Electronic Data Exchange In Physician-Hospital Organizations Participating With Advocate Physician Partners, 2006 And 2007



**SOURCES** Advocate Health Care. Community performance (denoted by dotted rule), 2007, Aetna Health.

by guest

submission by partnership member physicians to be 88.7 percent. This submission rate represents an annual savings of more than \$2 million to providers and another \$2 million to insurance companies, because partnership physicians submit more than four million preferred provider claims annually.

## Implications For ACO Design And Regulation

The partnership's structures and processes have overcome the four challenges to widespread adoption of accountable care organizations: dominance of small physician practices; traditional hospital medical staff structures; fee-forservice reimbursement; and private-sector acceptance.

Advocate Physician Partners signed its first commercial accountable care organization contract effective January 1, 2011 with the largest insurer in Illinois, Blue Cross Blue Shield. Other commercial contracts are expected to follow. The partnership model has broad applicability for the future of ACOs within the US health care system. Implementation guidelines and regulations by CMS should encourage this ACO model type in federal and federal-state programs.

Other key elements of the Advocate Physician Partners model that lend themselves to an accountable care structure include the ability to operate such a program over a large and diverse geographic area, financial arrangements that permit sharing of medical cost savings within an accountable care organization, and the ability to engage physicians in leading change. Given the cost of infrastructure, organizing for both governmental and commercial payers offers the best prospects for success. The partnership has demonstrated a model that succeeds with commercial payers.

#### Making The Model Work Elsewhere

There are real and perceived hurdles to overcome before the Advocate Physician Partners model can be attempted in other communities. First, infrastructure such as information systems, clinical protocols, patient outreach tools and staff, and professionals to coach physicians and their staffs is needed to drive performance. Partnering with hospitals can help overcome this

obstacle, because hospitals typically have data management and quality improvement infrastructure. Further help with infrastructure can come from several industry-sponsored organizations that offer programs to help physicians and hospitals together improve outcomes, as well as a growing number of commercial vendors that provide both technical assistance and consultations. For example, the American Medical Group Association and VHA have designed collaboratives to prepare physicians and hospitals to be accountable care organizations.

Second, physicians and hospitals have to demonstrate sustained commitment to improving inpatient and outpatient performance. Third, contracting with one or more managed care organizations for both base and incentive compensation is essential; it is facilitated by demonstrating value to employers and patients, the primary customers.

Finally, meeting the expectations of regulators such as the Federal Trade Commission has been a perceived barrier. However, publications and recent decisions by the commission, sponsored workshops, and statements by at least one commissioner point the way to acceptance of an ACO program by the FTC. 35,36 Furthermore, independent observers have provided detailed guidance on how to structure clinically integrated networks that will improve performance, meet regulatory concerns, and be accountable for performance. 37,38

#### Conclusion

Although the integrated care model with its employed physician workforce could easily become the dominant template for future accountable care organizations, this type of model represents a small fraction of all US providers at present.

A physician-hospital organization such as Advocate Physician Partners, with 2,700 independent practice physicians, demonstrates that such an organization can win market and regulatory acceptance; reduce costs; improve health outcomes; be held accountable for outcomes; incorporate payment mechanisms that reward value instead of simply volume; and report outcomes to the public. These critical components and this model for a successful ACO can be adapted across the current US health care system.

Although none of the authors has a financial interest in the venture, Advocate Physician Partners is a participant in a joint venture, CI-Now,

that assists physicians and hospitals in developing clinical integration programs. The authors thank Joanne Detch and Karen Pubentz for their assistance with the manuscript. [Published online December 16, 2010.]

#### NOTES

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Mark Shields, Pankaj Patel, Martin Manning, and Lee Sacks make the case that accountable care organizations (ACOs) need not necessarily be large, integrated systems that employ physicians, and they draw on their own experience to explain why. All are principals in Advocate Physician Partners—a managed care joint venture between Advocate Health Care and 3,600 physicians.

The authors teamed to "analyze all aspects of the Advocate Physician Partners model, including contracting, governance and improvement of quality, safety and cost-effectiveness," says Shields. The authors contend the Advocate model may be a more replicable template in a health care system still largely dominated by independent practitioners. "We and others will make lots of mistakes," says Sacks, "but the successful organizations will learn from their mistakes, make mid-course corrections, and continue to enhance the value of the care they provide."

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